

MEMORANDUM

TO: Joint Fiscal Committee; House Institutions Committee; Senate Institutions Committee

CC: Jeb Spaulding, Secretary of Administration

FROM: Jim Reardon, Commissioner of Finance and Management

RE: Accounting Standards for Engineering Costs – response to report requirement in Section 39 of Act 51 of 2013 (FY 2014 Capital Bill)

DATE: September 11, 2013

This report is in response to Section 39 of the FY 2014 Capital Bill (Act 51 of 2013). Section 39 states as follows:

Sec. 39. ACCOUNTING STANDARDS FOR ENGINEERING COSTS

(a) The Commissioner of Finance and Management shall establish a working group to develop a set of criteria and guidelines for allocating engineering costs between the Capital bill and the General Fund. The Working Group shall review current state practices, standard accounting classifications and approaches taken in other states. The Group shall include the Commissioner of Finance and Management or designee, the Commissioner of Buildings and General Services or designee, the Secretary of Natural Resources or designee, the State Auditor or designee, and a Joint Fiscal Officer or designee.

(b) On or before September 30, 2013, the Commissioner of Finance and Management shall present the proposal to the Joint Fiscal Committee and the Chairs of the House Committee on Corrections and Institutions and the Senate Committee on Institutions for review with the intent that the criteria and guidelines on cost allocations will be used in the FY 2015 capital budget.

Executive Summary and Recommendation

The Working Group reviewed the applicable accounting standards; the practices among various departments within the state government; and practices among other states. Based on these findings, I recommend that BGS proceed vigorously with the implementation of time tracking and other project cost tracking for staff engineering costs, so that these costs, where appropriate, can be capitalized according to proper accounting standards.). It should be emphasized that



capitalization of these costs for accounting purposes is a separate matter from how to fund the costs (operating budget or debt); the latter is a fiscal policy decision.

It will take some time to implement project tracking at BGS and hence determine the appropriate allocation between the Capital Bill and the operating budget. Once staff engineering costs are isolated to projects, it would seem appropriate to budget known capital costs to the Capital Bill, while non-capital costs would be charged to the operating budget. Such a policy would allow all known costs of a particular project in the Capital Bill to be identified and funded over the debt period.

Background:

The appropriate source for funding of staff engineering and architecture costs – operating budget or capital budget -- has been in debate for several years. The legislature directed the Joint Fiscal Office (JFO) to study how best to allocate engineering costs between the capital and general funds in Section 41 of Act 104 of 2012 (FY 2012 Capital Bill.) Catherine Benham of the JFO presented that report on January 16, 2013. (Rather than re-state large portions of that report, we will simply cite relevant pages and sections.) The JFO report presented a series of policy options. Rather than adopting one of those options, the legislature created the Working Group described above.

The Working Group met during the summer of 2013. As part of their work and discussion, the following efforts were undertaken:

- The Office of Budget and Management surveyed all state departments to determine whether they had engineering and/or architecture staff costs related to state construction projects;
- Certain departments – Department of Buildings and General Services; Agency of Natural Resources; and Agency of Transportation – were targeted for more in-depth study;
- The Agency of Administration business office prepared a review of the applicable accounting standards;
- The Office of Budget and Management conducted a condensed survey of other states' practices.

Survey of all Vermont Departments and Agencies:

As noted in the JFO report (pages 5 and 6), there are differences in the way staff engineering costs are accounted for among state departments. To ensure that we identified all the different treatments of these costs, the Office of Budget and Management surveyed all Vermont departments, agencies, and business units to identify in-house engineering and architecture staff costs relative to the development of public infrastructure (as opposed, for example, to regulatory enforcement).



That survey confirmed the findings of the JFO report; that is, the three primarily impacted departments are:

- Department of Buildings and General Services;
- Agency of Natural Resources; and,
- Agency of Transportation.

No other state department reported staff engineering costs related to public infrastructure.

Department of Buildings and General Services

The Department of Buildings and General Services (BGS) does not currently track staff engineering costs to specific capital projects. The process for budgeting and tracking staff engineering costs at BGS is as follows. Section B.113 of the Appropriations Act provides the budget for the BGS Engineering unit, which includes 25.17 full-time equivalent positions, accounting for \$2.5M of personal services costs. Including operating expenses, the total appropriation for FY 2014 is \$2,982,132. Currently, the entire appropriation for BGS Engineering, Dept ID 1150300000, is funded by a transfer from the Capital Bond fund as a single line item in the annual Capital Bill. As a funding source to 1150300000, the funding is effectively “expensed” on an annual basis and not capitalized against projects. This practice is inconsistent with the way that BGS treats similar services received for projects through the use of 3rd party contractors. Projects that require 3rd party architectural and engineering as well as project management services have these contract payments paid with bond funds and are charged directly to the projects as part of the project costs. To expense similar services performed by state employees is inconsistent with this costing method. Failure to add the staff time to the projects undervalues the true cost of a project and associated asset.

Regarding funding, the JFO report summarizes the history as follows:

For BGS, the funds to support engineering costs have shifted from general funds to capital funds, back to general funds, and then back to the capital funds. It appears that these shifts were related to the demands on the general fund and the relative availability of general versus capital funds. In other words, when general funds were tight, BGS engineering costs were shifted to capital funds. The current funding represents the costs of the engineering group within BGS and includes both [sic] costs of engineers, managers, administrative assistants, fee for space, and other such overhead expenses. Salary and benefit costs of these employees are approximately \$2.1million (86%) of the \$2.4 million allocated in the 2012 Capital Bill.

The history of bonded funds used to support the BGS engineering program is shown on page 3 of the JFO report, with additional details on pages 15 – 22.



Agency of Natural Resources

The Agency of Natural Resources tracks staff engineering costs to specific capital projects. However, in many instances, ANR capital projects are for the benefit of local governments or other entities, and are not owned by the State. As a historical practice, the specific non-State ANR projects in the Capital Bill do not include the staff engineering costs. Rather, the staff engineering costs associated with capital projects are separately appropriated in the Capital Bill (see, e.g., Act 51 of 2013: Sec. 11(a)(1)(C) (\$300,000); Sec. 11(a)(2)(B) (\$300,000); and Sec 11(b)(1)(D) (\$300,000)). Thus, these staff engineering costs for non-State projects are financed through State bonding, but are not capitalized for accounting purposes because the capital project is not a State asset. The state bond funds used to finance non-State projects are deposited into a revolving loan fund, and blended with federal dollars, which is used to award individual loans directly to these non-state entities. Staff engineering costs are not included in these loans that are comprised, in part, with state bond funds. Staff engineering costs for specific state projects (e.g, state parks) are paid from those Capital Bill appropriations. Funding project-based staff engineering costs through the ANR operating budget would put strains on ANR's already-constrained operational needs.

See the JFO report page 4, and pages 23-30 for a more thorough discussion.

Agency of Transportation

At the Agency of Transportation, staff engineering costs are charged to specific projects, using the agency's project cost system. An interface between the project cost system and the state's accounting system allows these costs to be capitalized for accounting purposes, where appropriate based on the project. The majority of AOT projects are paid on a "pay-as-you-go" basis using Transportation Funds, other dedicated transportation revenue sources, and federal funds. However, to the extent that projects are specifically funded by Transportation Infrastructure Bonds or other capital funding, the associated staff engineering costs are included in the project financing.

Generally Accepted Accounting Principles (GAAP)

The Agency of Administration business office, which provides business services to BGS, provides the following accounting information from publicly available sources.

There are 4 basic assumptions, 4 basic principles, and 4 basic constraints that are the basis for GAAP¹. They are as follows:

Assumptions

1. **Accounting Entity:** This principle assumes that the business is separate from its owners or other businesses.
2. **Going Concern:** This principle assumes that the business will continue to operate indefinitely. This assumption validates the methods of capitalization, depreciation, and amortization.



3. **Monetary Unit:** This principle assumes a stable currency will be the unit of record.
4. **Time-Period:** This principle assumes that economic activities can be divided into artificial time periods.

Principles

1. **Historical Cost:** This principle requires the business to account and report on an historical acquisition cost basis. This removes subjectivity in valuing assets. There is current pressure to move to fair market values as historical costs tend not to be relevant.
2. **Revenue Recognition:** This principle requires recognizing revenue when it is realized or realizable and earned, not when cash is received.
3. **Matching Principle:** Expenses have to be matched to revenue, if it is reasonable to do so. If no connection, then expenses can be charged as current period expenses. The principle demonstrates how much was expended to earn revenue. Depreciation expense is an example of matching expenditures with revenues.
4. **Full Disclosure:** Information disclosed should be enough for a judgment by the reader of the financial information while keeping the costs of reporting 'reasonable'.

Constraints

1. **Objectivity:** This principle says the financial statements must provide information that is based on objective evidence.
2. **Materiality:** This principle indicates that the significance of an item should be taken into account when it is reported. If the item will impact the decisions made by a reasonable person, then the item is considered 'significant'.
3. **Consistency:** The principle refers to the use of the same accounting principles and methods from period to period.
4. **Conservatism:** This principle says that when choosing between two solutions, the one that will be least likely to overstate assets should be selected.

Why Capitalize

The matching principle as well as the consistency and conservatism constraints would support capitalizing any costs directly attributable to the acquisition and placing of an asset into service or prolonging or extending the useful life of the asset (Asset Adds).

GAAP accounting rules for capitalizing costs are generally based on the principle of "future years' benefits"². As the asset will provide benefits to the owner over time, the asset should be capitalized and depreciated over the length of time for which benefits will be realized.

Why Bond Funds

Just as the matching principle supports the capitalizing of any costs directly attributed to the acquisition and placing of an asset into service through the matching of future benefits with depreciation expense, the matching principle would also imply there should be a matching of the revenue stream used to acquire and place an asset into service. Assets with a useful life of 20



years or more could be funded with the 20 year bond funds. This includes assets that are both constructed or purchased directly.

What Capital Funds Should Be Used For

Based on the matching principle and following the above scenario, long term assets should be funded with capital bond funds. For assets with a useful life of or greater than 20 years this would include:

- New buildings
- Building Additions
- Building Improvements that extend the life of the asset at least 20 years
- Infrastructure improvements
- Land

What Capital Funds Should NOT Be Used For

Based on the matching principle and following the same scenario, short term assets should be funded with general fund even if the asset is capitalized. For assets with a useful life less than 20 years this would include:

- Building Additions with a useful life of less than 20 years
- Building improvements that do not extend the useful life of the asset 20 years or more
- Expenditures that do not extend the life of the asset such as painting, carpeting, etc.
- Funding for studies that do not result in an asset
- Grants such as the recreational grants and any asset constructed for a non-state entity.

Professional Services

Professional services (Architectural, Engineering, and Project Management) provided by state employees should be added to the value of these assets and capitalized. Time not tied to long term assets should be funded with general fund and treated as a period expense. To exclude these labor costs will result in an undervaluing of the assets.

Survey of Other States:

The Office of Budget and Management worked with the National Association of State Budget Officers to survey a limited number of other states; specifically, those that serve on the Capital Budgeting Advisory Group (and hence were most likely to be able to quickly answer the survey questions). The question presented was whether these states charge their in-house engineering staff costs to their operating budget or their capital budget. As indicated below, while there is a mix of practices, the majority of states charge identifiable staff expenses (or a justifiable allocation percentage) to the relevant capital project. This is consistent with the survey in the JFO report (pages 5-6), which found that other New England states allow some allocation of engineering costs for capital projects. The survey results are as follows:



- **California:** The preference is to place all charges in the capital budget in order to get a true cost of the project.
- **Kentucky:** Charged to operating budget.
- **Nebraska:** With some limited exceptions, in Nebraska, in-house engineering staff costs are charged to the operating budget of the agency. [Note: Should be noted that Nebraska generally does not issue general obligation bonds; so there is no opportunity to finance these costs.]
- **Nevada:** Mainly funds in-house engineering and other professional costs to the associated capital project. There is a separate project in the CIP that funds in-house professional work planning the next CIP.
- **New Jersey:** Adds a flat percentage to the cost of each capital project to cover in-house engineering and other associated costs of the centrally-managed construction management unit. As such, it is part of each project's capital cost.
- **New York:** Has a hybrid system. In certain instances—mainly when the program managers are employed by a state agency—engineering costs are covered by the operating budgets. However, in certain instances, when a project is appropriated by the state and not administered by an internal department, engineering costs are built into the overall capital costs.
- **Virginia:** Has a hybrid system. In the past, many, if not most, of the project managers were paid out of operating funds. As operating budgets have been cut over the past ten years, more and more of the cost of the project managers has been shifted to capital budgets. Today, only a few of the project managers are paid from the operating budget, while the costs of the remainder are billed to the budgets of the capital projects on which they work.
- **Washington:** Funds in-house engineering and other associated costs primarily to the associated capital project.

Conclusion and Recommendations:

Regarding accounting practices, BGS should initiate a process to track staff engineering costs to specific projects, as the first step toward capitalizing those engineering costs that meet the applicable standards for a capital project. Previously, BGS did not have the capability to track such costs to projects. With the new VTHR payroll system, it should now be possible to track project time, tie it to projects, and capitalize it where appropriate. (The largest challenge will be to get the staff to keep track of their time and book it properly.) It should be emphasized that capitalization of these costs for accounting purposes is a separate matter from how to fund the costs (operating budget or debt); the latter is a fiscal policy decision.



It will take some time to implement project tracking at BGS and hence determine the appropriate allocation between the Capital Bill and the operating budget. Once staff engineering costs are isolated to projects, it would seem appropriate to budget known capital costs to the Capital Bill, while non-capital costs would be charged to the operating budget. Such a policy would allow all known costs of a particular project in the Capital Bill to be identified and funded over the debt period.

Given that the entirety of these engineering costs have been covered by the Capital Bill during the past several years, the net impact would be a portion of these costs shifting from the Capital Bill as general obligation debt to the operating budget (presumably primarily General Funds).

¹ These 12 assumptions, principles, and constraints can be found in full at the following hyperlink:
[http://en.wikipedia.org/wiki/Generally Accepted Accounting Principles \(United States\)](http://en.wikipedia.org/wiki/Generally_Accepted_Accounting_Principles_(United_States))

² <http://www.brighthub.com/office/finance/articles/80512.aspx>

